



## AGENDA

### **LOCAL ROAD ADVISORY BOARD**

Meeting No. 2017-02

March 27, 2017 - 6:30 P.M.

City Hall Council Chambers, 120 Malabar Road SE

#### **CALL TO ORDER:**

#### **ROLL CALL:**

#### **ADOPTION OF MINUTES:**

1. Meeting No. 2017-01; February 27, 2017.

#### **PUBLIC COMMENTS:**

#### **BUSINESS:**

1. General Discussion: By Don Jordan
2. Pavement Condition Index Review- By Troy Davidson
3. Geofabric for Pavement Preservation- Presentation by TenCate

#### **ADJOURNMENT:**

If an individual decides to appeal any decision made by the Local Road Advisory Board with respect to any matter considered at this meeting, a record of the proceedings will be required and the individual will need to ensure that a verbatim transcript of the proceedings is made, which record includes the testimony and evidence upon which the appeal is based (FS 286.0105). Such person must provide a method for recording the proceedings verbatim.

In accordance with the Americans with Disabilities Act, persons needing special accommodations for this meeting shall, at least 48 hours prior to the meeting, contact The City of Palm Bay Public Works, 321-953-8996, or Florida Relay System at 711.

**CITY OF PALM BAY, FLORIDA**  
**LOCAL ROAD ADVISORY BOARD**  
**Meeting No. 2017-01**

The Meeting was held Monday, the 27th day of February 2017, in the City Hall Council Chambers, 120 Malabar Road, SE, Palm Bay, Florida.

This meeting was properly noticed pursuant to law; the minutes are on file in the Public Works Department, 1050 Malabar Road, SW, Palm Bay, Florida. The minutes are not a verbatim transcript but a brief summary of the discussions and actions taken at the meeting.

**CALL TO ORDER:**

The meeting was called to order by Chairperson Weinberg at 6:35 P.M.

**ROLL CALL:**

<b>CHAIRPERSON:</b>	Philip Weinberg	Present
<b>VICE CHAIRPERSON:</b>	Don Jordan	Present
<b>MEMBER:</b>	Hiram Grandoit	Absent
<b>MEMBER:</b>	Jeremy Reiderman	Present
<b>MEMBER:</b>	Dan Fisher	Present
<b>MEMBER:</b>	Angelina Iglesias	Present
<b>MEMBER:</b>	Sara Moallem-Wood	Absent- Called out sick

**ALSO PRESENT:**

Jarvis Middleton, Director of Public Works  
Troy Davidson, Engineering Division Manager  
Mary Facey, Recorder.

**ADOPTION OF MINUTES:**

**1. Meeting No. 2016-02; April 4, 2016.**

Motion made by Mrs. Iglesias, seconded by Mr. Jordan, to adopt the minutes of Meeting No. 2016-02. Motion carried unanimously.

**PUBLIC COMMENTS:**

Mr. Ron Lockwood, 458 Reading St. SE- Mr. Lockwood stated that he represented the SE area where he lived, as others did not attend these meetings. The roads were not getting better. He hoped that the new Special Assessment would lead us in a new direction. He stated that the road list suggested what order the roads would be worked

on, and that it did not make sense, as some roads would be better done together. For example, Cogan North and Cogan South were separated on the list, and maybe they should be done together.

**BUSINESS:**

**1. Welcome & Introduction of New Board Members – Mr. Weinberg**

Mr. Jeremy Reiderman and Mr. Dan Fisher were introduced. The remainder of the board introduced themselves.

**2. Introduction of Public Works Staff – PW Staff**

Mr. Troy Davidson introduced himself as the Engineering Manager for Public Works. Mr. Jarvis Middleton introduced himself as Director of Public Works.

**3. Review of Bylaws – Mr. Weinberg**

A copy of the bylaws for The Local Road Advisory Board was submitted to each member in the Agenda Packet, prior to this meeting.

Mr. Weinberg commented on the term limits for his position. Mr. Weinberg's term as Chairperson expired in February 2017. Mr. Jordan would assume the role of Chairperson. The board would elect a new Vice Chairperson.

**4. Comments – Mr. Weinberg**

Mr. Weinberg discussed the need for each member to make the commitment to attend and participate on this board, as there had been issues in the past due to lack of attendance, and not meeting the Quorum rules. He asked, that if a member was unable to meet the needs of the Board, they should resign.

**5. Comments – Mr. Jordan**

Mr. Jordan has accepted the task, this is the first time he has done something like this, and may need some guidance from Staff in protocol. He commented that every person could make a difference. Mr. Reiderman had done some research on roads using Fiber, and that would assist the Board with having more resources to review. Mr. Jordan shared the Chamber of Commerce Map of Palm Bay. Mr. Jordan asked if additional copies could be provided to each of the Board members. Mrs. Facey would contact the Chamber to acquire the maps.

**6. Election of new Vice Chairperson – Mr. Jordan**

Mr. Jordan asked if there were any nominations for Vice Chair. Mrs. Iglesias asked if Mr. Weinberg could assume that role. Mr. Weinberg was an available candidate for Vice Chairperson.

Nomination made by Mrs. Iglesias, seconded by Mr. Fisher, to appoint Mr. Weinberg as the Vice Chairperson. Motion carried unanimously.

**7. FY16 Road Program recap – PW Staff**

Mr. Davidson provided an update on the Road Program, discussing Rejuvenation. Mrs. Iglesias asked how much notice would be given to the citizens when the rejuvenation process was in their area. Mr. Davidson responded approximately 3-4 days. Mr. Reiderman commented on research he did regarding Fabric for Reclamation processes. Mr. Middleton said that Fabric was still a new process, but had been used at other locations he had worked with in the past. There was no data supporting its effectiveness either way.

**8. FY17 Road Program discussion – PW Staff**

Mr. Reiderman would provide further information on Fabric to the board. He would also inquire with the company, to see if they would come and give the board an overview of the product and process.

R.J. Conlan was discussed. There was potential funding from the Bayfront Community Redevelopment Agency to assist in the build of an Urban Center for this tech corridor, utilizing some Public Works seed money.

The Next Local Road Advisory Board meeting would be held on March 27, 2017, at 6:30 pm, City Hall Council Chambers.

There being no further business, the meeting adjourned at 8:00 pm.

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Don Jordan, Chairperson

ATTEST:

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Mary Facey, Recorder

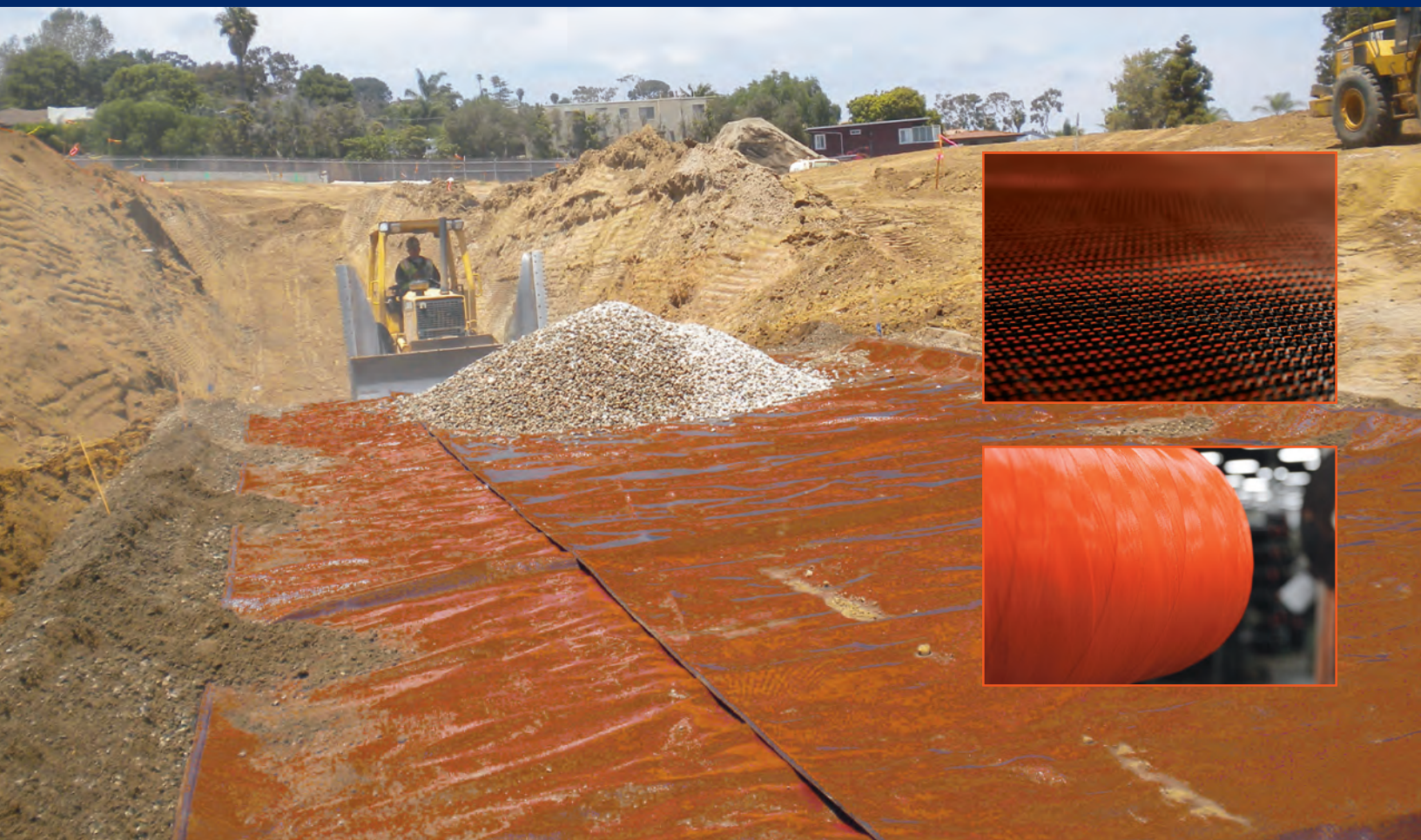


# RS*i*-Series

## GEOSYNTHETICS

Pavement Base Reinforcement  
Subgrade Stabilization

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RS380*i*  
RS280*i*



Protective & Outdoor Fabrics  
Aerospace Composites  
Armour Composites

Geosynthetics  
Industrial Fabrics  
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# Superior *integration*\*.

With the new Mirafi® RSi-Series, it's like comparing apples to oranges for Roadway Reinforcement.

## Orange wins.

You asked for the impossible...and we responded.



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As the leader in geosynthetic solutions, TenCate



MiraSpec Design Solutions Software provides cost savings and "green" savings by incorporating a geosynthetic.



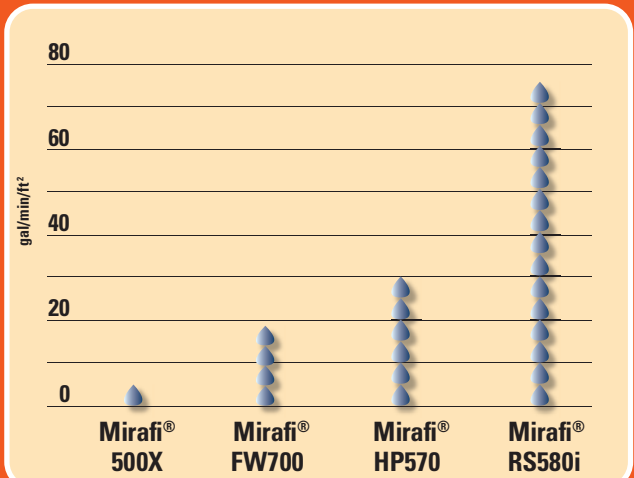
MiraSpec Design Solutions Software is easy to use and is available at no cost at [www.Mirafi.com](http://www.Mirafi.com)

Geosynthetics began the extensive research and design process of looking for the "perfect" geotextile that could move more water while concurrently retaining more soil within a roadway system. This product would also need to hold more force with less overall system movement in order to improve the base strength and support heavier loads; thus, resulting in longer life, less maintenance and costs, and better performance.

The solution we developed...  
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We have proven that a geotextile can solve a complex roadway problem, where once upon a time, the only solution

## Geosynthetic Waterflow



considered by some was a geogrid product. Mirafi® RSi is all about *integration*...

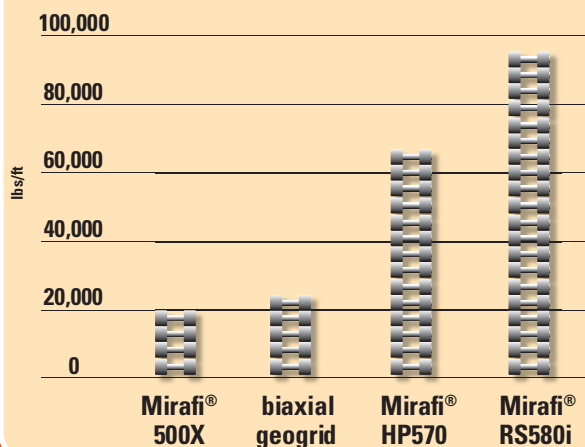
...Integration of a superior multi-layered construction of woven fibers of various dimensions specifically positioned relative to adjoining fibers to create three times the water flow AND an increase in AOS sieve size.

Because Mirafi® RSi-Series geosynthetics have higher tensile modulus properties than comparable stabilization products on the market today, it is perfect for base course reinforcement and subgrade stabilization in roads,



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## Modulus at 2% Strain Cross-Machine Direction



railways, runways and haul roads; and for stabilization of embankments on soft foundations. It also performs well for liner support, voids bridging, hazardous pond closures and other environmental purposes. Mirafi® RSi-Series geosynthetics are available in a variety of roll sizes to fit your specific project needs and requirements.

Because no one understands geosynthetics better than TenCate Geosynthetics...our materials make a difference.

\* Integration refers to the overall set of described characteristics based on a review of technical specifications for comparable products published by their respective manufacturers. Individual characteristics of these products vary and may meet, exceed, and fall below one or more of the above described individual characteristics.

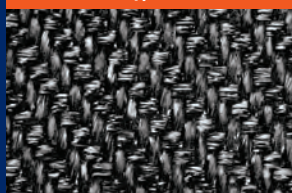


## Advantages

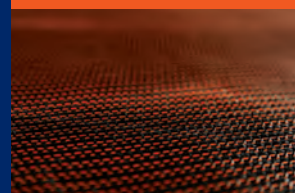
Go to [www.mirafi.com](http://www.mirafi.com)  
for product demonstrations video.

### Product Identification

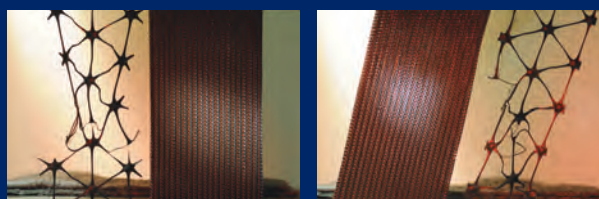
Mirafi® HP Geotextile  
(Typical)



Mirafi® RS580i



### Geogrids vs. Mirafi® RS580i



### Strength at Every Angle



### Go with the Flow



### Walk the Walk



RS380i & RS580i/Patent # 8,333,2200 and 8598,054. RS280i/Patent Pending.

# • SEPARATION • PRODUCT IDENTIFICATION

TenCate develops and produces materials that increase performance,  
reduce costs and enable people to achieve what was once unachievable.  
Our goal is to contribute significantly to progress in the industries in  
which we work.

The information contained herein is to the best of our knowledge accurate, but since the circumstances and conditions in which it may be used are beyond our control, we do not accept liability for any loss or damage, however arising, which results directly or indirectly from use of such information. Nor do we offer any warranty or immunity against patent infringement.

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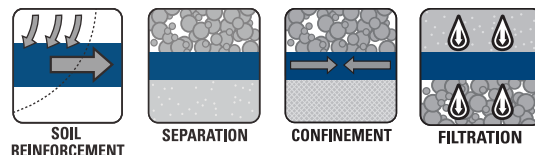
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materials that make a difference





## Mirafi® RSi - Series Woven Geosynthetics for Soil Stabilization and Base Course Reinforcement Applications

TenCate develops and produces materials that deliver increased performance, reduce costs and measurable results to provide advanced solutions utilizing patent pending Mirafi® RSi geosynthetics that make a difference.

The Difference Mirafi® RSi-Series Woven Integrated\* Geosynthetics Make:

- Modulus. Separation. Confinement. Water flow. Product identification. **Superior integration\***.
- Reinforcement Strength. Higher tensile modulus properties than the leading stabilization products.
- Separation and Filtration. Unique double layer construction provides a wide range of pore sizes for an excellent separation factor, superior filtration and flow characteristics of a fine to coarse sand layer.
- Soil and Base Course Interaction. Excellent soil and base course confinement resulting in greater load distribution.
- Durability. Robust damage resistance for moderate to severe stress installations.
- Roll Sizes. Mirafi® RSi-Series geosynthetics come in several roll sizes to fit project requirements.

- Seams. Panels can be seamed in the factory or field, providing cross-roll direction strength to facilitate efficient installation.

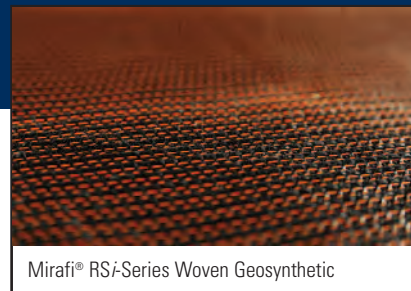
### APPLICATIONS

When superior performance, flexibility and versatility are necessary, Mirafi® RSi-Series geosynthetics make the difference for varying application needs including: base course reinforcement and subgrade stabilization for road, runway and railway construction; embankment stabilization on soft foundations; reinforcement for mechanically stabilized earth (MSE) structures; liner support, voids bridging, reinforcement over soft hazardous pond closures and other environmental market applications.

### INSTALLATION GUIDELINES\*\*

#### Geosynthetic Placement

Place the geosynthetic directly on prepared surface. It is advisable to leave vegetative cover such as grass and weeds in place to provide a support matting for construction activities. The geosynthetic should be deployed flat and tight with no wrinkles or folds. The rolls should be oriented as shown on plans to ensure the principal strength direction of the material is placed in the correct orientation. Adjacent rolls should be overlapped or seamed as a function of subgrade strength (CBR). Prior to fill placement, Mirafi® RSi-Series geosynthetics should be held in place using suitable means such as pins, soil, staples or sandbags to limit movement during fill placement.



Mirafi® RSi-Series Woven Geosynthetic

#### Fill Placement

Fill should be placed directly over Mirafi® RSi geosynthetic in 8in (20cm) to 12in (30cm) loose lifts. For very weak subgrades, 18in (45cm) lifts or thicker lifts may be required to stabilize the subgrade, as directed by the engineer. Most rubber-tired vehicles can be driven at slow speeds, less than 10mph (16km/h) and in straight paths over the exposed geosynthetic without causing damage. Sudden braking and sharp turning should be avoided. Tracked construction equipment should not be operated directly upon the geosynthetic. A minimum fill soil thickness of 6in (15cm) is required prior to operation of tracked vehicles over the geosynthetic. Turning of tracked vehicles should be kept to a minimum to prevent tracks from displacing the fill and damaging the geotextile.

\*\* These guidelines serve as a general basis for installation. Detailed instructions are available from your TenCate representative.

Visit [www.mirafi.com](http://www.mirafi.com) for a demonstration video

Breakthrough Research: TenCate Mirafi® Geosynthetic Outperforms Others in Independent Full - Scale Study.



Protective & Outdoor Fabrics  
Aerospace Composites  
Armour Composites

Geosynthetics  
Industrial Fabrics  
Synthetic Grass

  
materials that make a difference

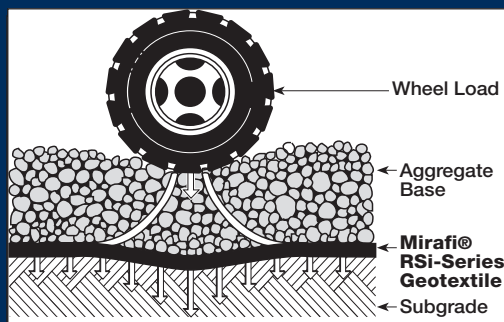
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## Mirafi® RSi - Series Woven Geosynthetics

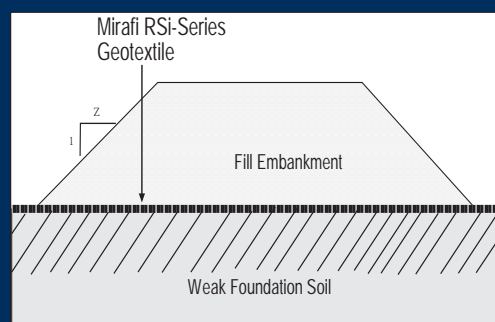
for Soil Stabilization and Base Course Reinforcement Applications

Mechanical Properties	Test Method	Unit	RS280i	RS380i	RS580i
<b>STRENGTH</b>			(Patent Pending)	(Patent #8,333,220 and 8,598,054)	
Tensile Modulus @ 2% strain (CD)	ASTM D4595	lbs/ft (kN/m)	30,000 (438)	51,000 (744)	90,000 (1313)
Tensile Modulus @ 5% strain (CD)	ASTM D4595	lbs/ft (kN/m)	32,400 (472)	45,120 (658)	87,600 (1279)
<b>HYDRAULIC</b>					
Flow Rate <sup>1</sup>	ASTM D4491	gal/min/ft <sup>2</sup> (l/min/m <sup>2</sup> )	70 (2852)	75 (3056)	75 (3056)
Permittivity <sup>1</sup>	ASTM D4491	sec <sup>-1</sup>	0.9	0.9	1.0
<b>SOIL RETENTION</b>					
Apparent Opening Size (AOS) <sup>2</sup>	ASTM D4751	U.S. Sieve (mm)	40 (0.425)	40 (0.425)	40 (0.425)
Pore Size O <sub>50</sub>	ASTM D6767	microns	196 <sup>4</sup>	185 <sup>4</sup>	185 <sup>4</sup>
Pore Size O <sub>95</sub>	ASTM D6767	microns	345 <sup>4</sup>	365 <sup>4</sup>	350 <sup>4</sup>
<b>SOIL INTERACTION</b>					
Interaction Coefficient <sup>3</sup>	ASTM D6706	---	0.89 <sup>5</sup>	0.89 <sup>5</sup>	0.9 <sup>5</sup>
Factory Seam Strength	ASTM D4884	lbs/ft (kN/m)	2400 (35)	2700 (39.4)	3000 (43.8)
UV Resistance (at 500 hours) <sup>5</sup>	ASTM D4355	% strength retained	90	90	90
<sup>1</sup> Minimum Roll Value					
<sup>2</sup> ASTM D4751: AOS is Maximum Opening Diameter Value					
<sup>3</sup> Interaction Coefficient value is for sand or gravel based on testing by SGI Testing Services.					
<sup>4</sup> Typical Values					
<sup>5</sup> Minimum Test Value					
<b>Physical Properties</b>					
Roll Width		Unit	RS280i	RS380i	RS580i
Roll Length		ft (m)	15 (4.6) 17 (5.2)	15 (4.6) 17 (5.2)	15 (4.6) 17 (5.2)
Roll Area		ft (m)	300 (91)	300 (91)	300 (91)
		yd <sup>2</sup> (m <sup>2</sup> )	500 (418) 567 (474)	500 (418) 567 (474)	500 (418) 567 (474)

### Mirafi® RSi-Series Woven Geosynthetics



Subgrade Load Distribution



Embankments Over Soft Soils

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